National Institute of Environmental Health Sciences

Effect of localizing fruit and vegetable consumption on greenhouse gas emissions and nutrition, Santa Barbara County

Author(s): Cleveland DA, Radka CN, Muller NM, Watson TD, Rekstein NJ, Wright HV, Hollingshead SE

Year: 2011

Journal: Environmental Science & Technology. 45 (10): 4555-4562

Abstract:

The US agrifood system is very productive, but highly centralized and resource intensive with very weak links between production and consumption. This contributes to high levels of malnutrition and greenhouse gas emissions (GHGE). A popular approach to improvement is localization-reducing direct transport (farm to retail distance, or "food miles"). We examined Santa Barbara County (SBC) California, which mirrors the high production, nutritional and environmental problems, and growing localization movement of California. SBC ranks in the top 1% of US counties in value of agricultural products, and >80% of this value is produce (fruits and vegetables). We calculated the amount of produce grown in and consumed in SBC and estimated that >99% of produce grown in SBC is exported from the county, and >95% of produce consumed in SBC is imported. If all produce consumed in SBC was grown in the county (100% localization), it would reduce GHGE from the agrifood system

Source: http://dx.doi.org/10.1021/es1040317

Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Unspecified Exposure, Unspecified Exposure

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

Geographic Location:

resource focuses on specific location

United States

Health Impact:

specification of health effect or disease related to climate change exposure

General Health Impact

Intervention: ☑

strategy to prepare for or reduce the impact of climate change on health

A focus of content

Mitigation/Adaptation: ☑

mitigation or adaptation strategy is a focus of resource

Mitigation

Resource Type: ☑

format or standard characteristic of resource

Research Article

Timescale: ☑

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment: ☑

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content